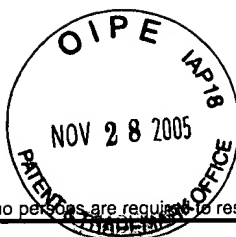


Doc Code: AP.PRE.REQ



PTO/SB/33 (07-05)

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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

550718-077

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on 11/23/05

Signature John F. Kane

Typed or printed name John F. Kane

Application Number

09/691,017

Filed

October 18, 2000

First Named Inventor

Haruo Kamei

Art Unit

3723

Examiner

Eziamara Anthony  
Ojini

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒

attorney or agent of record.

Registration number 44,815

☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

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Signature

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11/23/05  
Date

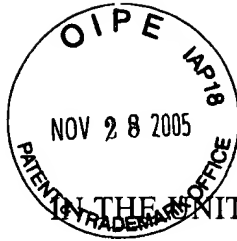
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

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\*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Applicant : Haruo Kamei  
Serial No. : 09/691,017  
Filed : October 18, 2000  
Title : ABRASIVE MATERIAL  
Docket : 550718-077  
Examiner : Eziamara Anthony Ojini  
Art Unit : 3723

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ALEXANDRIA, VA 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

This request is filed in response to the final Office action dated August 24, 2005 and is accompanied a Notice of Appeal and the applicable fee. Claims 7, 9, 11, 13, 14 and 16-27 remain in this application and have been finally rejected. Applicants submit that the rejections of record are clearly not proper and request that the rejections be withdrawn.

Claims 7, 9, 11, 13-14 and 16-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nokubi et al. (EP0798081A2) in view of Kitajima et al. (U.S. Patent No. 5,495,844) and Kimura et al. (U.S. Patent No. 4,753,838). Applicants submit that the rejection of these claims is improper because the Office has failed to carry its burden of establishing a *prima facie* case of obviousness. Initially, applicants submit that the Kitajima et al. and Kimura et al. references are directed to non-analogous art and, furthermore, even if combinable with the Nokubi et al. reference, there is insufficient motivation or suggestion for combining the references so as to arrive at the present invention. Therefore, the rejection should be withdrawn.

The claims of the present application are directed to an abrasive material for spray application in a surface-finishing process wherein the abrasive material is in the form of granules comprising a core and a polishing layer. The polishing layer includes a flexible layer formed on the core and abrasive particles. Nokubi et al. is directed to abrasive grains for spray application to the surface of a work. However, as acknowledged by the Office, Nokubi et al. fail to disclose

or suggest a polishing layer comprising a flexible layer formed on the surface of the core. The Office relies on the disclosures in Kimura et al. and Kitajima et al. to supply this missing element. According to the Office, it would have been obvious to modify the abrasive grains disclosed in Nokubi et al. to include a polishing layer comprising a flexible layer formed on the surface on the core “so as to retain the abrasive particles on the core during polishing process.”

The Kimura and Kitajima references are not directed to abrasive materials for spray application and, although the references are directed to materials containing abrasive particles, they are not in the same field of endeavor as the present invention. To be considered analogous art, the reference must satisfy the following test: “(1) Whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor’s endeavor, whether the reference is still reasonably pertinent to the particular problem with which the inventor is involved.” *In re Clay*, 966 F.2d 656, 658-59 (Fed. Cir. 1992).

In reviewing the cited references, it is apparent that the Kimura and Kitajima references are not from the same field of endeavor as the present invention. Kitajima discloses a grinding wheel for use in a grinding machine. The grinding wheel is not granular and the structure of the grinding wheel provides absolutely no teaching that would be relevant to the granular, abrasive materials for use in spray applications as set forth in the pending application. Likewise, Kimura discloses a polishing-sheet material for use in polishing silicone wafers. The structure of the polishing-sheet material provides no teaching that would be relevant to the abrasive materials for spray applications as set forth in the pending application. The mere fact that the present invention and the two references all contain some reference to abrasive particles is insufficient to put the cited references in the same field of endeavor as the present invention. *In re Clay*, 966 F.2d at 659 (“However, Sydansk cannot be considered to be within Clay's field of endeavor merely because both relate to the petroleum industry”).

Furthermore, these references cannot be considered to be in the same field of endeavor as the present invention because they are not reasonably pertinent to the particular problem with which the applicants are involved. To be “reasonably pertinent”, the reference must be “one

which, because of the matter with which it deals, logically would have commended itself to an inventor's intention in considering his problem.” *In re Clay*, 966 F.2d at 659.

The problem confronting the applicant was how to provide flexibility to the abrasive material for use in a spray application without requiring that the core itself be flexible. Neither of the secondary cited references is reasonably pertinent to this particular problem. As indicated at page 2, lines 6-11 of the present application, the flexible layer of the abrasive material provides the flexibility conventionally required of the core. The flexible layer allows the abrasive material to slide on the work surface by absorbing the impact when the abrasive material strikes the work surface. The secondary reference as cited by the Examiner is directed to completely unrelated problems and provides no guidance with respect to the problem addressed by the applicant. A person of ordinary skill in the art would not have reasonably expected to solve the problem of flexibility of a sprayed abrasive material by looking to references dealing with polishing sheets and grinding wheels. Therefore, Kitajima and Kimura are not reasonably pertinent to the particular problem with which the applicants are involved and, as such, are not analogous art, thereby making the Section 103 rejection improper.

Even assuming for the sake of argument that Kimura and Kitajima could somehow be considered analogous art, applicants submit that the Office has failed to show proper motivation for combining the cited references to arrive at the present invention. The Office action indicates that the motivation to combine the references is the need to retain the particles on the core during polishing. See August 24, 2005 Office Action, page 3. Applicants respectfully submit that the necessary motivation for combining these references is not present. The motivation to combine must be “clear and particular” and, in the present case, the purported motivation is neither.

To establish a *prima facie* case of obviousness there must be some motivation or suggestion in the references that would lead one of ordinary skill in the art to combine the various components, without knowledge of the claimed invention, to obtain the present invention. *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q. 2d(BNA) 1313, 1370 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, without knowledge of the claimed invention, would have selected these components for combination in the manner

claimed”). The mere identification of the various components in the prior art references is insufficient to render the present invention obvious. The motivation or suggestion “must be considered in the context of the teaching of the entire reference.” *Id.* One of skill in the art reading the Nokubi et al. reference would not be motivated to turn to art relating to grinding wheels or polishing sheets for providing abrasive materials with a flexible layer for use in spray applications. The references are devoid of any suggestion of picking and choosing various features of each reference to arrive at the present invention. One of skill in the art could never arrive at the present invention based on any motivation or suggestion in the references without the benefit of the applicants’ disclosure. Accordingly, applicants submit that the claims of the present application are not obvious over the cited references.

In the on-going prosecution of this application, the Office has maintained the position that the motivation for combining these references was to retain the abrasive particles on the core. However, the Office has failed to indicate the source of this motivation. There is no indication or suggestion in the cited references that adhesion of the particles in Nokubi et al. was an issue that needed to be addressed. The abrasive material in Nokubi et al. already provides for retention of the abrasive particles on the core. The Office failed to provide the basis for the conclusory statement that there was a need to improve adhesion of the particles on the core. Without some indication that there is a need for an improved adhesion, there would be no reason for one of ordinary skill in the art to look to other references to include an additional component to provide improved adhesive. Therefore, applicants respectfully submit that the Office has failed to provide the necessary motivation for combining the references so as to obtain the present invention and, therefore, has failed to establish a *prima facie* case of obviousness.

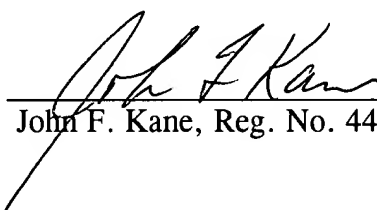
Claims 11 and 13 are considered to be separately patentable because the prior art references fail to disclose or suggest a polishing layer comprising multiple layers. The Examiner indicates that it would have been obvious to modify the apparatus of Nokubi et al. with a polishing layer comprising multiple layers so as to have sufficient resiliency. However, the abrasive material described by Nokubi et al. depends on the carrier for its resiliency and not the polishing layer. Therefore, there is no motivation or suggestion in Nokubi et al. that the use of

multiple layers would be desirable. Therefore, for at least this reason as well, applicant submits that claims 11 and 13 patentable over the prior art of record.

Likewise, the Office has failed to establish a *prima facie* case of obviousness with respect to claims 14, 16, 17 and 18. These claims recite that the flexible layer includes an emulsion adhesive. Nokubi et al. fail to disclose or suggest the use of an emulsion adhesive as part of a flexible layer for attaching abrasive particles onto the abrasive material. Again, the Examiner's argument, that the use of a known material for the intended use is a matter of obvious design choice, fails to meet the burden of establishing a *prima facie* case of obviousness. The Examiner has failed to provide any indication as to why one of ordinary skill in the art would use an emulsion adhesive for this particular application. The mere fact that an emulsion adhesive can be used to secure abrasive particles is insufficient. Applicants respectfully request that the rejection of these claims be withdrawn.

In view of the foregoing, it is respectfully submitted that the rejections of record are clearly not proper and that the claims currently pending are distinguishable from the references cited and are in condition for allowance. Applicants respectfully request that a Notice of Allowability be issued in this case.

Respectfully submitted,

  
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